

REMARKS

Claim 1 has been amended to more particularly claim the invention. Applicants have amended claim 1 to recite that the polycarbonate polyol contains less than 10 mole percent of cycloaliphatic diol. This amendment does not constitute new matter and is supported in the specification at page 5 lines 11-25 wherein it is disclosed that in addition to linear and branched aliphatic radicals that cycloaliphatic radicals can be used without limitation to prepare the polycarbonate polyols. See *In re Johnson and Farnham* 194 U.S.P.Q. 187, 196 (CCPA 1977) in which it is stated:

Here, as we hold on the facts of this case, the "written description" in the 1963 specification supported the claims in the absence of the limitation, and that specification, having described the whole, necessarily described the part remaining. The facts of the prosecution are properly presented and relied on, under these circumstances, to indicate that appellants are merely excising the invention of another, to which they are not entitled, and are not creating an "artificial subgenus" or claiming "new matter."

35 U.S.C. § 112 second paragraph does not prohibit Applicants from changing what they regard as their invention during pendency of the application. See *In re Saunders*, 170 USPQ 213, 225 (CCPA 1971) in which it was stated:

Since the patent law provides for the amendment during prosecution of claims, as well as the specification supporting claims, 35 USC 132, it is clear that the reference to "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention" in the second paragraph of 35 USC 112 does not prohibit the applicant from changing what he "regards as his invention" (i.e., the subject matter on which he seeks patent protection) during the pendency of his application.

Accordingly, it is respectfully requested that the amendment be entered. A **MARKED-UP VERSION** of the amended claim is attached.

Rejection under 35 USC 103(a)

Claims 1-25 have been rejected under 35 USC 103(a) as being unpatentable over PCT application W0 98/37115 in view of Ammons (U.S. Patent 4,103,070). Applicants respectfully traverse this rejection and request that it be reconsidered and withdrawn.

The combination of PCT application W0 98/37115 and Ammons (U.S. Patent 4,103,070) does not make Applicants' invention obvious. The primary reference PCT application W0 98/37115 does not disclose or suggest the use of polycarbonate polyols in the preparation of polyurethane coatings. The secondary reference Ammons requires a particular polyurethane that uses special polycarbonate diols and is described in column 2 lines 24-36 included below.

The special polycarbonate diols of the present invention are prepared from mixtures of linear aliphatic and cycloaliphatic diols. The cycloaliphatic diol contributes cycloaliphatic structural units to the final polyurethane resulting in a high degree of polymer backbone chain irregularity thus avoiding the problem of crystallinity and allowing the production of desirable polyurethanes with a lower urethane content than was considered possible in the prior art. Moreover, special polycarbonate diols may be prepared which, when formulated into the final polyurethane, inhibit the tendency of the polyurethane to bloom.

The special polycarbonate diols required by Ammons in order to prepare the particular polyurethane having the aforementioned properties is synthesized from a mixture of linear aliphatic and cycloaliphatic diols and is described in column 2 lines 45-53 included below.

Polycarbonate diols of the present invention are prepared from a mixture of linear aliphatic diol and cycloaliphatic diol. At least about 10 mole percent of the cycloaliphatic diol is required to yield a non-crystalline polyurethane.

As quoted above, Ammons specifies that at least 10 mole percent of cycloaliphatic diol is required to yield a non-

crystalline polyurethane. This is important to Ammons as is disclosed at column 2 lines 24-36, quoted above.

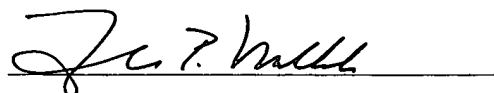
Applicants' amended claim 1 recites a limit of up to 10 mole percent of cycloaliphatic diols. Therefore, there is no motivation to use the teachings of Ammons and combine them with the primary reference to achieve Applicants' invention. Hence, the secondary reference, Ammons, does not provide the deficiencies of the first reference.

Applicants believe that a higher proportion of cycloaliphatic diols in the polycarbonate polyols used to produce the photochromic polyurethane coating would not be optimum and would detract from the Fischer microhardness range and photochromic performance properties.

In view of the above amendment and remarks, reconsideration and withdrawal of the rejection under 35 U.S.C. 103(a) are respectfully requested. Allowance of all of Applicants' presenting pending claims is respectfully requested.

In the event that the Examiner finds that the foregoing amendment and remarks do not place this application in condition for immediate allowance, it is requested that the Examiner contact Applicants' Agent at the telephone number found below to arrange for an interview to discuss the claims of the present application before the Examiner issues another Communication.

Respectfully submitted,



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Pittsburgh, Pennsylvania
May 27, 2003

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1. (Amended) An article comprising, in combination a substrate, and a photochromic polyurethane coating on at least one surface of said substrate, said coating having a Fischer microhardness of from 50 to 150 Newtons per mm², wherein the improvement comprises preparing said photochromic polyurethane coating from components comprising:

(a) polycarbonate polyol(s) comprising less than 10 mole percent of cycloaliphatic diol, said polycarbonate polyol having a molecular weight of from 500 to 5,000 grams per mole;

(b) optionally, a different organic polyol having a molecular weight of at least 500 grams per mole;

(c) an isocyanate;

(d) photochromic compound(s); and

(e) optional catalyst;

said components being used in such proportions to produce a photochromic polyurethane coating exhibiting less than 25% swell in the Percent Swelling Test.

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